



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

OFFICE OF CHEMICAL SAFETY
AND POLLUTION PREVENTION

May 22, 2015

John J. Wrubel
Regulatory Affairs Director
Nippon Soda Co., Ltd.
c/o Nisso America Inc.
88 pine Street, 14th Floor
New York NY 10005

Subject: Label Amendment – Adding Seed Treatment Applications
Product Name: Topsin 4.5FL Fungicide
EPA Registration Number: 8033-122
Application Date: March 11, 2015
Decision Number: 502369

Dear Mr. Wrubel:

The amended label referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide and Rodenticide Act, as amended, is acceptable. This approval does not affect any conditions that were previously imposed on this registration. You continue to be subject to existing conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one copy of the final printed labeling before you release the product for shipment with the new labeling. In accordance with 40 CFR 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 CFR 152.3.

Should you wish to add/retain a reference to the company's website on your label, then please be aware that the website becomes labeling under the Federal Insecticide Fungicide and Rodenticide Act and is subject to review by the Agency. If the website is false or misleading, the product would be misbranded and unlawful to sell or distribute under FIFRA section 12(a)(1)(E). 40 CFR 156.10(a)(5) list examples of statements EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the Agency find or if it is brought to our attention that a website contains false or misleading statements or claims substantially differing from the EPA approved registration, the website will be referred to the EPA's Office of Enforcement and Compliance.

Your release for shipment of the product constitutes acceptance of these conditions. If these conditions are not complied with, the registration will be subject to cancellation in accordance

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with FIFRA section 6. If you have any questions, please contact Aswathy Balan by phone at 703-347-0510, or via email at balan.aswathy@epa.gov.

A handwritten signature in black ink, reading "Shaja B. Joyner". The signature is written in a cursive style with a large, stylized initial "S".

Shaja B. Joyner, Product Manager 20
Fungicide-Herbicide Branch
Registration Division 7505P

Enclosure: Stamped label

ACCEPTED

May 22, 2015

Under the Federal Insecticide, Fungicide
and Rodenticide Act as amended, for the
pesticide registered under
EPA Reg. No. 8033-122

GROUP 1 FUNGICIDE

TOPSIN® 4.5FL Fungicide

ACTIVE INGREDIENT:

Thiophanate-methyl (dimethyl[1,2-phenylene)-

bis(iminocarbonothioyl)]bis(carbamate))* 45.0%

OTHER INGREDIENTS: 55.0%

TOTAL: 100.0%

Contains 4.5 pounds thiophanate-methyl per gallon.

*Also known as dimethyl 4,4'-o-phenylenebis[3-thioallophanate]

TOPSIN is a registered trademark of Nippon Soda Company, Ltd., and is licensed to NISSO
TM LLC, and is covered by one or more of the following U.S. Patents: 3,769,308; 3,856,847;
4,020,095; and 4,029,813.

**KEEP OUT OF REACH OF CHILDREN
CAUTION**

FIRST AID

If inhaled:

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
- Call a poison control center or doctor for further treatment advice.

If on skin or clothing:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. Contact the Rocky Mountain Poison Control Center at 1-866-673-6671 for emergency medical treatment information.

EPA Reg. No.8033-122

NET CONTENTS: _____ Gallons

EPA Est. No.

Batch/Lot # _____

Nippon Soda Co., Ltd.
c/o Nisso America Inc.
88 Pine St., 14th FL.
New York, NY 10005

DRAFT Master Label 3-11-15

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

Harmful if absorbed through the skin or inhaled. Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are nitrile and butyl rubber. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

Handlers mixing, loading, and applying the product as a dip (including application of product in Kaolinite clay to conifer seedling roots) must wear:

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves,
- Chemical-resistant footwear plus socks,
- Chemical-resistant apron.

All other mixers, loaders, and applicators must wear:

- Long-sleeved shirt and long pants,
- Shoes plus socks,
- Chemical-resistant gloves,
- Chemical-resistant apron for mixers, loaders, and other handlers exposed to the concentrate.

Seed treatment applicators and other seed treatment handlers must wear:

- Long-sleeved shirt and long pants,
- Shoes plus socks,
- Chemical-resistant gloves for all mixers and loaders and for applicators using hand-held equipment,
- Chemical-resistant apron for mixers, loaders, and other handlers exposed to the concentrate.

Note: Persons involved in bagging treated seed, sewing or moving bags of treated seed, or cleaning up bagging areas or seed treatment equipment are pesticide handlers and must wear the PPE required on this label for pesticide handlers.

User Safety Requirements

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

ENGINEERING CONTROLS

When handlers use enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water.

DIRECTIONS FOR USE

SHAKE WELL BEFORE USING

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Do not apply when wind speed favors drift beyond the area intended for treatment.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI). Exemption: The Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

Do not enter or allow workers entry into treated areas during the restricted-entry interval (REI). The REI for each crop is listed in the directions for use associated with that crop.

Exemption: If this product is applied by drenching or if treated seed is soil-injected or soil incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves made of any waterproof material,
- Chemical-resistant footwear plus socks,
- Chemical-resistant headgear for overhead exposures.

GENERAL INSTRUCTIONS AND INFORMATION

Apply Topsin 4.5FL with ground or aerial equipment, using sufficient volume of spray to provide thorough coverage. Continuous agitation is required to keep the material in suspension. Nippon Soda Co., Ltd.. does not recommend tank mixes with highly alkaline pesticides, such as Bordeaux mixture or lime sulfur. No claim of compatibility with other pesticides is implied. Use the higher rate under conditions of severe disease pressure. Also, see local State Extension Service recommendations for application schedules.

Use the fl. oz./Acre rate for concentrate sprays (less than 400 gallons on apples, less than 300 gallons on stonefruit). Use the fl. oz./100 gal. rate for dilute ground applications. For aerial applications, use a minimum of 5 gallons/A for row crops, and a minimum of 10 gallons/A for tree crops. For ground applications use a minimum of 20 gallons/A for row crops and 30 gallons/A for tree crops. Higher spray volume will generally result in better coverage and better disease control. Lack of control when using below minimum spray volumes is solely at the risk of the applicator/user, including use of electrostatic sprayers.

Chemigation instructions follow. Do not apply through any irrigation system unless these instructions are followed.

For crops without labeled uses of thiophanate-methyl, observe a 30-day plantback restriction.

Use on all labeled non-bearing tree fruit and tree nuts: Topsin 4.5FL may be used for control of the diseases listed on the label for these crops during the non-bearing years of new plantings, and on nursery stock. All use directions and limitations must be followed, except for the PHI, which is not applicable. Begin applications as disease is first observed or expected. Tank mixing with a protectant fungicide is strongly recommended for resistance management.

RESISTANCE MANAGEMENT: To avoid the development of tolerant or resistant strains of fungi, Topsin 4.5FL should always be tank-mixed with a fungicide of different chemistry,

and/or a fungicide of different chemistry should be alternated with Topsin 4.5FL. DO NOT USE PRODUCTS CONTAINING THIABENDAZOLE OR OTHER PRODUCTS CONTAINING THIOPHANATE-METHYL IN COMBINATION, IN ROTATION, OR AS A SUBSTITUTE FOR TOPSIN 4.5FL AS THEY ARE OF SIMILAR CHEMISTRY AND WILL CONTRIBUTE TO THE DEVELOPMENT OF RESISTANCE. If after using Topsin 4.5FL as recommended, and the treatment is not effective, a tolerant or resistant strain of fungi may be present. Discontinue the use of Topsin 4.5FL for at least one season. As long as these precautions are followed, Topsin 4.5FL can be useful for disease control, even if resistant strains are present.

Crop	Diseases	Fl. Oz./ Acre	Fl. Oz./100 gal.	Remarks
Almonds Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days.	Brown Rot Blossom Blight (Monilinia) Scab (Cladosporium) Jacket Rot (Monilinia, Sclerotinia, Botrytis) Leaf Blight (Seimatosporium)	20 - 30		Apply as needed between pink bud and petal fall. Topsin 4.5FL may be applied alone at pink bud for Brown Rot control. For all other applications, Topsin 4.5FL should be applied with a contact fungicide such as Ziram 76DF for broad-spectrum control and resistance management. Do not apply more than 60 fl. oz. of product (2.1 lbs a.i.)/A/year.
Apples Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days.	Apple Scab (Venturia) Black Pox* (Helminthosporium papulosum) Flyspeck (Zygophiala) Powdery Mildew (Podosphaera) Sooty Blotch (Gloeodes) Black Rot (Botryosphaeria obtusa) Brooks Fruit Spot (Mycosphaerella) White Rot* (Botryosphaeria dothidia)	15-20 (in CA use 30)	3.75 - 5	Apply at 5- to 10-day intervals from green tip through petal fall; continue at 7- to 14-day intervals in cover sprays. Do not apply more than 80 fl. oz. of product (2.8 lbs a.i.)/A/year. Pre-harvest interval: 1 day Follow resistance management guidelines under Directions for Use.

Crop	Diseases	Fl. Oz./ Acre	Fl. Oz./100 gal.	Remarks
	Pre-Harvest use to control Post-Harvest Diseases on Apples			
	Storage Rot Blue Mold (<i>Penicillium expansum</i>) Gray Mold (<i>Botrytis cinerea</i>) Bulls-Eye Rot (<i>Neofabraea</i> spp.)	1	3.75 - 5	<p>Apply as a pre-harvest spray within 2 weeks to 3 days of harvest. Thorough coverage of the fruit is required. Application closer to harvest may provide better efficacy. For resistance management, do not use a benzimidazole fungicide (i.e. Mertect®) post-harvest following Topsin 4.5FL pre-harvest application. Application of a non-benzimidazole post-harvest fungicide such as Penbotec™ or Schlor® will provide additional protection from post-harvest diseases.</p> <p>Do not apply more than 80 fl. oz. of product (2.8 lbs a.i.)/A/year. Pre-harvest interval: 1 day</p>
<p>Beans, dry and succulent</p> <p>Including: Lima bean Snap bean Kidney bean Mung bean Navy bean Pinto bean Wax bean Broad bean Fava bean Asparagus bean Blackeyed pea Cowpea Sweet lupine White lupine White Sweet lupine Grain lupine Chick pea Garbanzo bean</p> <p>Do not enter or allow worker entry into</p>	<p>White Mold (<i>Sclerotinia</i>) Gray Mold (<i>Botrytis</i>) Anthracnose (<i>Colletotrichum</i>)</p>	<p>30-40</p> <p>OR 20-30</p>		<p>For one application: Apply when 100% of plants have at least one open bloom or when conditions are favorable for disease development.</p> <p>OR</p> <p>For multiple applications: Make the first application when 10% to 30% of plants have at least one open bloom and follow with sequential applications on a 4 to 7-day interval. Apply prior to the development of disease for best results. Do not apply more 80 fl. oz. of product (2.8 lbs a.i.)/A/year. Pre-harvest Interval: California only, 14 days for succulent beans, 28 days for dry beans and lima beans. Pre-harvest Interval: all other States, 14 days for succulent beans and lima beans, 28 days for dry beans.</p>

Crop	Diseases	Fl. Oz./ Acre	Fl. Oz./100 gal.	Remarks
treated areas during the restricted entry interval (REI) of 24 hours for succulent beans and 3 days for dry beans.				
Cucurbits: Cantaloupe, Casaba, Cucumbers, Melons, Pumpkins, Summer and Winter Squash, and Watermelons	General Information			Do not apply more than 60 fl. oz. of product (2.1 lbs a.i.)/A/year from any combination of application timings. Pre-harvest interval: 1 day Topsin 4.5FL can be used in a tank mix with Penncozeb® (mancozeb) or chlorothalonil for additional disease control and resistance management. Follow resistance management guidelines under Directions for Use.
Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.	Acremonium/ Cephalosporium Hypocotyl Rot	10		Apply in-furrow, on top of the seeds at planting. Do not use less than 10 gallons of water per acre.
	Anthracnose* (Colletotrichum) Gummy Stem Blight* (Didymella) Powdery Mildew (Erysiphe, Sphaerotheca) Target Spot* (Corynespora)	10		Begin applications when plants begin to run or when disease first appears, and repeat at 7 to 14 day intervals or as needed. For Target Spot, use at 7-day intervals as needed.
	Belly Rots* (Rhizoctonia, Fusarium)	10		Apply in sufficient volume to allow runoff to the soil. Will not control Pythium or Phytophthora.
	Suppression of Vine Decline (Monosporascus) Charcoal Rot (Macrophomina)	10		Apply through buried drip irrigation (chemigation) to the root zone. For disease suppression, apply at 14-day intervals, beginning at emergence and continuing to harvest.

Crop	Diseases	Fl. Oz./ Acre	Fl. Oz./100 gal.	Remarks
				Applications weekly or biweekly, beginning 4 to 6 weeks prior to harvest will also offer suppression, but may not be as effective as a season-long program.
Garlic (clove treatment)	Penicillium Clove Rot		20	Completely immerse garlic cloves in suspension for at least 5 minutes. Continuously agitate the solution tank by hydraulic or mechanical means. After treatment, remove cloves from solution and drain. Dry cloves after treatment and prior to planting.
Onions* Garlic (In furrow) Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days.	White Rot (Sclerotium cepivorum)	40 broadcast		Spray directly into the open furrow at the time of planting seed, sets or bulbs. Not for this use through any type of irrigation system. Do not apply more than 40 fl. oz. of product (1.4 lbs a.i.)/A/year.
Peanuts Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.	Early Leaf Spot (Cercospora) Late Leaf Spot (Cercosporidium) Rust (Puccinia) Limb Rot (Rhizoctonia) Web Blotch (Ascochyta)	10		Begin applications when disease first appears and repeat at 14-day intervals as needed. Do not apply more than 40 fl. oz. of product (1.4 lbs a.i.)/A/year. Pre-harvest interval: 14 days Topsin 4.5FL should not be used alone. Use only in combination with a non-benzimidazole fungicide such as Penncozeb® 75DF (mancozeb) at 1½ lbs per acre or chlorothalonil. Follow resistance management guidelines under Directions for Use.

Crop	Diseases	Fl. Oz./ Acre	Fl. Oz./100 gal.	Remarks
<p>Pecans</p> <p>Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days.</p>	<p>Brown Spot (Cercospora)</p> <p>Downy Spot (Mycosphaerella)</p> <p>Liver Spot (Gnomonia)</p> <p>Powdery Mildew (Microsphaera)</p> <p>Scab (Fusicladium)</p> <p>Stem End Blight (Botryosphaeria)</p> <p>Zonate Leaf Spot (Cristulariella)</p>	20		<p>Begin applications when first leaves are showing and repeat at 3 to 4-week intervals until shuck split. Do not apply after shuck split.</p> <p>Do not apply more than 60 fl. oz. of product (2.1 lbs a.i.)/A/year.</p> <p>Follow resistance management guidelines under Directions for Use.</p>
<p>Pistachios</p> <p>Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 3 days.</p>	<p>Shoot Blight (Botrytis, Botryosphaeria)</p>	30 - 40		<p>Apply at bloom.</p> <p>Apply in a minimum of 100 gallons per acre by ground or 20 gallons per acre by air.</p> <p>For aerial application, fly over every row or center.</p> <p>Do not apply more than 40 fl. oz. of product (1.4 lbs a.i.)/A/year.</p>
<p>Potatoes</p> <p>Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days.</p>	<p>White Mold (Sclerotinia sclerotiorum)</p>	20-30		<p>Make the first application at row closure to full bloom of the primary flower clusters (prior to petal drop). Repeat the application within 7 to 14 days and at 7- to 14-day intervals if conditions for disease development are favorable. Thorough coverage of the flowers, stems, and branches is essential for disease control.</p> <p>Use a minimum of 6 gallons/A for aerial application.</p> <p>Apply prior to the development of disease for the best results.</p> <p>Do not apply more than 80 fl. oz. of product (2.8 lbs a.i.)/A/year.</p> <p>Pre-harvest interval: 21 days</p> <p>May be tank mixed with Penncozeb[®] (mancozeb) for Early and Late Blight</p>

Crop	Diseases	Fl. Oz./ Acre	Fl. Oz./100 gal.	Remarks
				control.
Soybeans Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.	General Information			Do not apply more than 40 fl. oz. of product (1.4 lbs a.i.)/A/year. Pre-harvest interval: 21 days Do not graze or feed treated vines or hay to livestock.
	Anthracnose (Colletotrichum) Brown Spot (Septoria) Frogeye Leaf Spot (Cercospora) Pod and Stem Blight (Diaporthe, Phomopsis) Purple Seed Stain (Cercospora)	10-20		Apply from full bloom to when pods are 1/8" to 1/4" in length. Make a second application 14 to 21 days later. Do not make the second application later than 14 days after pods average 1/4" in length or when beans form in the pod. Use the high rate under severe disease pressure.
		20		FOR SEED BEANS ONLY---For seed quality, make a single application when beans form in the pod.
	White Mold (Sclerotinia)	15-20		Make one application at early bloom (R-1 to R-2 stage) followed by a second application 7 to 14 days later if conditions are favorable for continued disease pressure. Thorough coverage of the flowers, stems, and branches is essential for disease control. Use a minimum of 5 gallons water/A by air.
	Aerial Blight (suppression)	20		Make initial application when disease threatens and repeat 14 to 21 days later if needed.

Crop	Diseases	Fl. Oz./ Acre	Fl. Oz./100 gal.	Remarks
<u>Stone Fruit</u> Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 2 days.	General Information			Do not apply more than 80 fl. oz. of product (2.8 lbs a.i.)/A/year. Pre-harvest interval: 1 day Follow resistance management guidelines under Directions for Use.
Apricots	Brown Rot Blossom Blight Fruit Brown Rot (Monilinia)	20-30 (in CA use 30)	6.7-10	Apply at early bloom (red bud). Make a second application at full bloom. If needed under severe disease pressure, apply additional sprays at 10- to 14-day intervals between full bloom and final pre-harvest sprays.
Cherries Sweet and Sour	Brown Rot Blossom Blight Fruit Brown Rot (Monilinia)	20-30 (in CA use 30)	6.7-10	Apply at early bloom (early popcorn). Make a second application at full bloom. If needed under severe disease pressure, apply additional sprays at 10- to 14-day intervals between full bloom and final pre-harvest sprays.
	Cherry Leaf Spot (Coccomyces)	22.5-30	7.5-10	Applications may be made at petal fall or before (when leaves first unfold) and at first, second, and third cover at 10- to 14-day intervals and one spray 14 to 21 days after harvest.
	Powdery Mildew (Podosphaera, Sphaerotheca)	20-30 (in CA use 30) PLUS 22.5-30	6.7-10 PLUS 7.5-10	Apply at early bloom (early popcorn). Make a second application at full bloom. PLUS Apply at shuck fall and first cover.
Nectarines	Brown Rot Blossom Blight Fruit Brown Rot (Monilinia)	20-30 (in CA use 30)	6.7-10	Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development. If needed under severe disease pressure, apply additional sprays at 10- to 14-day intervals between full bloom and final pre-harvest sprays.

Crop	Diseases	Fl. Oz./ Acre	Fl. Oz./100 gal.	Remarks
Peaches	Brown Rot Blossom Blight Fruit Brown Rot (Monilinia)	20-30 (in CA use 30)	6.7-10	Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development. If needed under severe disease pressure, apply additional sprays at 10- to 14-day intervals between full bloom and final pre-harvest sprays.
	Peach Scab (Cladosporium)	20-30 (in CA use 30) PLUS 22.5-30	6.7-10 PLUS 7.5-10	Apply at early bloom (pink bud). Make a second application at full bloom if conditions favor disease development. PLUS Apply at shuck split and at first cover sprays.
Plums and Prunes	Brown Rot Blossom Blight Fruit Brown Rot (Monilinia)	20-30 (in CA use 30)	6.7-10	Apply at early bloom (green tip). Make a second application at full bloom. If needed under severe disease pressure, apply additional sprays at 10- to 14-day intervals between full bloom and final pre-harvest sprays.
	Black Knot (Dibotryon)	20-30 (in CA use 30)	6.7-10	Apply at pre-bloom, petal fall, and at first, second, and third cover sprays at 10- to 14-day intervals.
	Leaf Spot (Coccomyces)	20-30 (in CA use 30)	6.7-10	Applications may be made at petal fall, shuck split, and at first, second, and third cover sprays at 10- to 14-day intervals and 1 spray 14 to 21 days after harvest.
Strawberries Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24	General Information			Do not apply more than 80 fl. oz. of product (2.8 lbs. a.i.)/A/year. Pre-harvest interval: 1 day Follow resistance management guidelines under Directions for Use.
	Crown Rot* (Colletotrichum spp.)	15-20		Begin applications after establishment of the transplants and continue through first bloom at 10 to 14-day intervals. Use the high rate if the

Crop	Diseases	Fl. Oz./ Acre	Fl. Oz./100 gal.	Remarks
hours.	Suppression only			fields have a history of Colletotrichum crown rot and/or conditions are favorable for development of the disease. Will not control Phytophthora species.
	Fruit Rot (Botrytis) Leaf Blight (Dendrophoma) Leaf Scorch (Diplocarpon) Powdery Mildew (Sphaerotheca)	15-20		Begin applications at early bloom and continue at 7- to 10-day intervals. Use the higher rate under conditions of severe disease pressure.
Sugar Beets Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.	General Information			Do not apply more than 60 fl. oz. of product (2.1 lbs a.i.)/A/year. Pre-harvest interval: 21 days. Follow resistance management guidelines under Directions for Use.
	Cercospora Leaf Spot (Cercospora)	10–20		Apply when conditions become favorable for disease development before the disease appears and follow with a non-benzimidazole fungicide within 14 days of application or as needed. Topsin 4.5FL should be tank mixed with a protectant fungicide such as Penncozeb® or super Tin® when resistant strains of Cercospora are present in the field. For areas east of the Rocky Mountains: Do not make more than one application of Topsin 4.5FL per season for Cercospora Leaf Spot.
	Powdery Mildew (Erysiphe)	10–20		Apply as soon as disease symptoms appear and follow with a non-benzimidazole fungicide at a 14-day interval or as needed. Topsin 4.5FL can be tank-mixed with sulfur products such as Microthiol® Disperss® at 5 to 10 lbs/A for additional disease control and resistance management.

Crop	Diseases	Fl. Oz./ Acre	Fl. Oz./100 gal.	Remarks
Triticale and Fall-seeded Wheat For this use in Idaho, Oregon, and Washington ONLY Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 24 hours.	Foot Rot, Strawbreaker, Eye Spot (Pseudocercospora la)	20		Apply Topsin 4.5FL at the rate indicated in a single application by air or ground after tillering but before stem elongation has begun. Use sufficient water to obtain thorough coverage. Do not apply more than 20 fl. oz. of product (0.7 lb a.i.)/A/year. Do not cut for hay within 90 days of application. Do not allow livestock to graze in treated areas before harvest.

* Not for this use in California

NOTE: Dilute sprays are not to exceed maximum rate per acre.

DIRECTIONS FOR USE ON CONIFERS
(Not for this use in California)

CROP	DISEASE		RATE (Lb/A), MINIMUM GALLONAGE	REMARKS
Conifers (Pine) Austrian Red Scots Christmas Trees	Tip Blight (Diplodia)		20 fl. oz. per 100 gal./A	Apply at bud break. Repeat 10 to 14 days later, just before needles emerge from sheath; repeat again 10 to 14 days after needle emergence. Do not apply more than 60 fl. oz. of product (2.1 lbs. a.i.)/A/year.
(Fir) Douglas	Swiss Needle Cast (Phaenocarpa)		20 fl. oz. per 50 gal./A	Apply initially in early May. Repeat at 4-week intervals.

	Rhabdocline Needle Cast			Do not apply more than 100 fl. oz. of product (3.5 lbs. a.i.)/A/year.
<ul style="list-style-type: none"> - Add a spreader/sticker to improve coverage. - Use minimum gallonage with mist-blower types of sprayers and higher gallonage with conventional sprayers. - Do not graze livestock in treated areas. - Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. 				
Conifers (seedling treatment) Longleaf	Brown Needle Blight (Scirrhia)		1.25 fl. oz. product per 9.5 oz. dry Kaolinite clay for seedling roots	Wet seedling roots in clean water, then apply Topsin 4.5FL/Kaolinite mixture to wet roots. Do not apply mixture to seedling foliage.
Loblolly Longleaf Slash	Fusarium and Rhizoctonia Root Rot		2.5 fl. oz. product per 50oz. Kaolinite clay, plus enough water to make a slurry	Thoroughly cover seedling roots with Topsin 4.5FL/Kaolinite slurry. Do not apply mixture to seedling foliage.
<ul style="list-style-type: none"> - During treatment, avoid excessive drying of roots or exposure to temperatures greater than 90 °F or less than 32 °F. - Topsin 4.5FL does not control Pythium or Phytophthora. - Do not enter or allow worker entry into treated areas during the restricted entry interval (REI) of 12 hours. 				

DIRECTIONS FOR USE THROUGH CHEMIGATION SYSTEMS

USE IN CALIFORNIA BY CHEMIGATION ONLY FOR BEANS, CUCURBITS (CANTALOPE, CASABA, CUCUMBERS, MELONS, PUMPKINS, SQUASH, WATERMELONS), PEANUTS, POTATOES, SOYBEANS, STRAWBERRIES, AND SUGAR BEETS.

GENERAL INSTRUCTIONS

Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, solid set or hand move; or drip (mini-micro sprinklers, strip tubing, trickle) irrigation systems. Do not apply this product through any other type of irrigation system. Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments

should the need arise.

Do not connect chemigation system (including greenhouse systems) used for pesticide irrigation to any public water system unless the pesticide label-prescribed safety devices for public water systems are in place. Public water system means a system for the provision of piped water for human consumption if such a system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

SYSTEM REQUIREMENTS

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.

Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow. The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.

The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

APPLICATION INSTRUCTIONS

Observe the requirements in the System Requirements section above.

Apply Topsin 4.5FL only through systems containing anti-siphon and check valves designed to prevent water source contamination or overflow of the mix tank and containing interlocking controls between the metering device and the water pump to insure simultaneous shut-off.

Maintain a gentle continuous agitation in mix tank during mixing and application to assure a uniform suspension.

Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute suspension per unit time.

Application of more than recommended quantities of irrigation water per acre may result in decreased product performance.

Do not apply when wind speed favors drift, when system connections or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product cannot be flushed and must be dismantled and drained. In a center pivot system, block the nozzle set nearest the well/pivot/injection unit to prevent spray being applied to this area.

Where sprinkler distribution patterns do not overlap sufficiently, unacceptable disease control may result.

Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water.

Topsin 4.5FL may be applied in conjunction with chemically neutral liquid fertilizers. Application in conjunction with highly alkaline fertilizers, such as aqueous ammonia, is likely to cause a degradation

of the pesticide, resulting in reduced performance and should be avoided.

SPRAY PREPARATION:

Remove scale, pesticide residues, and other foreign matter from the chemical tank and entire injector system. Flush with clean water. Prepare a suspension of Topsin 4.5FL in a mix tank. Fill the tank with $\frac{1}{2}$ or $\frac{3}{4}$ the desired amount of water. Start mechanical or hydraulic agitation. Slowly add the required amount of Topsin 4.5FL and then the remaining volume of water.

Sprinkler Irrigation - Notes

Observe all System Requirements and Application Instructions above.

Set sprinkler system to deliver a maximum of 0.4 inch of water per acre. Volumes of water higher than this may reduce efficacy. Start sprinkler and then uniformly inject the suspension of Topsin 4.5FL into the irrigation water line so as to deliver the desired rate per acre. The suspension of Topsin 4.5FL should be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing. When treatment with Topsin 4.5FL has been completed, do not irrigate the treated area for 24 to 48 hours to prevent washing the chemical off the crop.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Where sprinkler distributed patterns do not overlap sufficiently, unacceptable disease control may result.

Check local restrictions and requirements regarding sprinkler irrigation applications, as they may vary from state to state.

Drip (Mini-Micro Sprinklers, Strip Tubing, Trickle) Irrigation - Notes

Observe all System Requirements and Application Instructions above.

A pesticide supply tank is recommended.

SEED TREATMENT USES

GENERAL INSTRUCTIONS AND INFORMATION

NOTE: This product contains no colorant. The purchaser of this product is responsible for ensuring that all seed treated with this product are adequately colored with a suitable colorant to prevent its accidental use as food for man or feed for animals. Refer to 21CFR, Part 2.25. Any colorant added to treated seed must be cleared for use under 40CFR, Part 180.1001. Alternatively, use in combination with other colored seed treatment products may provide adequate coloration.

TOPSIN 4.5 FL is an effective fungicide for seed treatment that provides early season protection of seedlings against rhizoctonia. Seed should be sound and well-cured before treatment.

Do not use TOPSIN 4.5 FL in combination with other seed treatment products unless compatibility has been verified. Read and follow carefully all label directions of each combination product. When using combinations of products, the most restrictive of label limitations and precautions must be followed.

Seed Treatment Equipment: TOPSIN 4.5 FL may be used both for commercial and for on-farm application. It can be applied with mechanical, slurry, or mist-type seed treating equipment, as long as the equipment can be calibrated to accurately and uniformly apply the product to seed without undue mechanical damage to the seed. Uniform application to seed is important for all seed treatment products.

Treatment of mechanically damaged seed or seed of low vigor or poor quality may result in reduced germination. Treat and conduct germination tests on a small test sample of seed before using this product on commercial quantities. Due to seed quality and seed storage conditions beyond the control of Nippon Soda Co., Ltd. (Nisso), Nisso makes no claims or guarantees as to germination of carry-over seed.

Seed should be sound and well-cured before treatment. Refer to the label rates below. TOPSIN 4.5 FL is typically diluted with water and/or mixed with other products to attain an appropriate slurry application volume (fl.oz./cwt slurry rates) to provide effective treating. The appropriate volume of slurry depends on crop, weather, type of treater and other factors and should be adjusted as per normal treating practices for the circumstances. Contact your local supplier or distributor representative for specific recommendations.

TO ENSURE UNIFORMITY, MIX PRODUCT WELL BEFORE USE.

TOPSIN 4.5 FL plus water and/or other treatments should be mixed thoroughly prior to treating seed. Recalibrate treating equipment to compensate for the required slurry rate to ensure all products are applied at the correct rate.

APPLICATION INSTRUCTIONS

Crop(s)	Application Rate
WHEAT, TRITICALE <i>For early season control of seed decay (Fusarium, Rhizoctonia) and suppression of seedling blight (Fusarium, Rhizoctonia)</i>	0.14 – 0.28 fl.oz./cwt
SOYBEANS NOTE: Seed may be treated on a fl.oz./seed unit (to deliver a target mg active ingredient/kernel) basis or and a per weight of seed basis, as shown. <i>For early season control of seed decay (Phomopsis, Fusarium, Rhizoctonia) and suppression of seedling blight (Fusarium, Rhizoctonia)</i>	Per Seed Unit: 0.065-0.13 fl.oz./seed unit (140,000 seeds) (applies 0.0075-0.015 mg ai/seed) OR Per Seed Weight: 0.14 – 0.28 fl.oz./cwt
DRY BEANS and SNAP BEANS: <i>For early season control of seed decay (Phomopsis, Rhizoctonia) and suppression of seedling blight (Fusarium, Rhizoctonia)</i>	0.14 – 0.28 fl.oz./cwt

Use higher rates for higher levels of seedling blight protection.

TREATED SEED LABELING

THE FEDERAL SEED ACT REQUIRES THAT BAGS CONTAINING TREATED SEED MUST BE LABELED WITH THE FOLLOWING INFORMATION:

- "This bag contains seed treated with TOPSIN 4.5 FL Seed Treatment Fungicide containing thiophanate-methyl. **Do not** use for food, feed, or oil purposes. Store away from feed and food stuffs."

LABELS FOR COMMERCIALY TREATED SEED MUST ALSO INCLUDE THE FOLLOWING ENVIRONMENTAL HAZARDS STATEMENTS:

- "Exposed treated seed may be hazardous to birds and wildlife. Dispose of all excess treated seed and seed packaging or containers by burial away from bodies of water in accordance with any local requirements. Cover, incorporate, or collect treated seeds spilled during loading and planting. **DO NOT** contaminate bodies of water when disposing of planting equipment wash water."

THE U.S. ENVIRONMENTAL PROTECTION AGENCY REQUIRES THE FOLLOWING STATEMENTS ON CONTAINERS CONTAINING TREATED SEED:

- "DO NOT allow children, pets or livestock to have access to treated seeds."
- "DO NOT graze or feed livestock on treated areas for 45 days after planting."
- "Wear long pants, long-sleeved shirt, shoes, socks and chemical-resistant gloves when opening this bag or loading/pouring the treated seed."
- "After the seeds have been planted, do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. Exception: If the treated seed is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is: coveralls, chemical-resistant gloves made of any waterproof material, and chemical-resistant footwear."

USE RESTRICTIONS

Care must be exercised in the handling of treated seed. Augers used for handling treated seed should not be used to move seed for feed, food or oil processing. Do not re-use bags from treated seed to handle food or feed products.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

PESTICIDE STORAGE: Store in the original container in a dry area. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur. If spilled during storage or handling, absorb with sand or other inert material and dispose of absorbent in accordance with the Pesticide Disposal Instructions listed below.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container.

For containers \leq 5 gallons:

Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container $\frac{1}{4}$ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For containers $>$ 5 gallons:

Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container $\frac{1}{4}$ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**IMPORTANT INFORMATION
READ BEFORE USING PRODUCT**

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product reflect the opinion of experts based on field use and tests, and must be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Nippon Soda Co., Ltd. or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of Nippon Soda Co., Ltd. and Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Nippon Soda Co., Ltd. and Seller harmless for any claims relating to such factors.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, NIPPON SODA CO., LTD. AND SELLER MAKE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ON THIS LABEL.

To the extent consistent with applicable law, Nippon Soda Co., Ltd. or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product and **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF NIPPON SODA CO., LTD. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF NIPPON SODA CO., LTD. OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

Treatment of seed, especially seed that is mechanically damaged or seed known to be of low vigor and poor quality, may result in reduced germination and/or reduction of seed and seedling vigor. Treat and conduct germination tests on a small test sample of seed before treating commercial quantities with a selected chemical treatment that includes this product. Due to seed quality and seed storage conditions beyond the control of Nippon Soda Co., Ltd. (Nisso), Nisso makes no claims or guarantees as to germination of carry-over seed.

Nippon Soda Co., Ltd. and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of Nippon Soda Co., Ltd.

GROUP	1	FUNGICIDE
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TOPSIN® 4.5FL

Turf and Ornamental Fungicide

ACTIVE INGREDIENT:

Thiophanate-methyl (dimethyl[1,2-phenylene)-

bis(iminocarbonothioyl)]bis(carbamate))* 45.0%

OTHER INGREDIENTS: 55.0%

TOTAL: 100.0%

Contains 4.5 pounds thiophanate-methyl per gallon.

*Also known as dimethyl 4,4'-o-phenylenebis[3-thioallophanate]

KEEP OUT OF REACH OF CHILDREN
CAUTION

FIRST AID

If inhaled:

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
- Call a poison control center or doctor for further treatment advice.

If on skin or clothing:

- Take off contaminated clothing.
- Rinse skin immediately with plenty of water for 15-20 minutes.
- Call a poison control center or doctor for treatment advice.

Have the product container or label with you when calling a poison control center or doctor or going for treatment. Contact the Rocky Mountain Poison Control Center at 1-866-673-6671 for emergency medical treatment information.

EPA Reg. No.8033-122

EPA Est. No.

NET CONTENTS: _____ Gallons

Batch/Lot # _____

Nippon Soda Co., Ltd.
c/o Nisso America Inc.
88 Pine St., 14th FL.
New York, NY 10005

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS
CAUTION

Harmful if absorbed through the skin or inhaled. Avoid contact with skin, eyes or clothing. Avoid breathing vapor or spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some materials that are chemical-resistant to this product are nitrile and butyl rubber. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

Handlers mixing, loading, and applying the product as a dip (including application of product in Kaolinite clay to conifer seedling roots) must wear:

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves,
- Chemical-resistant footwear plus socks,
- Chemical-resistant apron.

All other mixers, loaders, and applicators must wear:

- Long-sleeved shirt and long pants,
- Shoes plus socks,
- Chemical-resistant gloves,
- Chemical-resistant apron for mixers, loaders, and other handlers exposed to the concentrate.

User Safety Requirements

Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables exist, use detergent and hot water. Keep and wash PPE separately from other laundry. Discard clothing and other materials that have been drenched or heavily contaminated with this product's concentrate. Do not reuse them.

ENGINEERING CONTROLS

When handlers use enclosed cabs in a manner that meets the requirements listed in the Worker Protection Standard (WPS) for agricultural pesticides [40 CFR 170.240(d)(4-6)], the handler PPE requirements may be reduced or modified as specified in the WPS.

USER SAFETY RECOMMENDATIONS

Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.

Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

Users should remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean

clothing.

ENVIRONMENTAL HAZARDS

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Runoff from treated areas may be hazardous to aquatic organisms in neighboring areas. Do not contaminate water when disposing of equipment wash water.

DIRECTIONS FOR USE

SHAKE WELL BEFORE USING

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

Do not apply when wind speed favors drift beyond the area intended for treatment.

AGRICULTURAL USE REQUIREMENTS

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE), and restricted-entry interval. The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard. Do not enter or allow worker entry into treated areas during the restricted entry interval (REI). Exemption: The Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

Do not enter or allow workers entry into treated areas during the restricted-entry interval (REI). The REI for each crop is listed in the directions for use associated with that crop.

Exemption: If this product is applied by drenching, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil, or water, is:

- Coveralls over long-sleeved shirt and long pants,
- Chemical-resistant gloves made of any waterproof material,

- Chemical-resistant footwear plus socks,
- Chemical-resistant headgear for overhead exposures.

NON-AGRICULTURAL USE REQUIREMENTS

The requirements in this box only apply to uses of this product that are NOT within the scope of the Worker Protection Standard for agricultural pesticides (40CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, or greenhouses.

Do not allow others to enter until sprays have dried.

GENERAL INFORMATION for Turf and Ornamental Uses

Topsin 4.5FL Turf and Ornamental Fungicide is a broad spectrum fungicide exhibiting preventative, curative, and systemic properties. It is useful on a wide variety of turf and ornamental disease problems. Apply Topsin 4.5FL Turf and Ornamental Fungicide with ground equipment, using sufficient volume of spray to provide thorough coverage. Use the higher rates under conditions of severe disease pressure. Also, see local State Extension Service recommendations for application schedules.

Chemigation instructions follow Directions For Use. Read and follow these instructions carefully for this method of application.

Mixing instructions: **SHAKE WELL BEFORE USING.** Some settling may occur during prolonged periods of non-use. When high pH tank mixes exist, the interval between mixing and application should be minimized. The buffering of tank water to pH 6-7 prior to the addition of Topsin 4.5FL Turf and Ornamental Fungicide is recommended. Add required amount of Topsin 4.5FL Turf and Ornamental Fungicide to partially filled tank (1/2 total volume), agitate by mechanical or hydraulic means, add tank mix product if used (see below), agitate again and then add remaining required amount of water.

Continuous agitation is recommended to keep the material in proper suspension. For best results, use spray mixture the same day it is prepared.

Tank mixing instructions: Topsin 4.5FL Turf and Ornamental Fungicide is compatible with most commonly used pesticides. If tank mixing with other materials, add products in the following order: wettable powders, dry flowables, liquid flowables, emulsifiable concentrates, and soluble materials such as fertilizers. No claim of compatibility with other products is implied. Do not tank mix with copper-containing materials or with highly alkaline pesticides, such as Bordeaux mixture or lime sulfur. Consult the intended tank mix partner product label for appropriate application rates and use instructions. Follow the label directions for the most restrictive of label precautions and limitations. This product may not be mixed with any product containing a label prohibition against such mixing. Read and observe the most restrictive precautionary statements and other information appearing on product labels used in mixtures. Topsin 4.5FL Turf and Ornamental Fungicide may be applied in conjunction with chemically neutral liquid fertilizers. Application in conjunction with highly alkaline fertilizers, such as aqueous ammonia, may cause a degradation of the pesticide, resulting in reduced performance and should be avoided.

RESISTANCE MANAGEMENT: To avoid the development of tolerant or resistant strains of fungi, Topsin 4.5FL Turf and Ornamental Fungicide should always be tank-mixed with a fungicide of different chemistry, and/or a fungicide of different chemistry should be alternated with Topsin 4.5FL Turf and Ornamental Fungicide. **DO NOT USE PRODUCTS CONTAINING THIABENDAZOLE OR OTHER PRODUCTS CONTAINING THIOPHANATE-METHYL IN COMBINATION, IN ROTATION, OR AS A SUBSTITUTE FOR TOPSIN 4.5FL TURF AND ORNAMENTAL FUNGICIDE AS THEY ARE OF SIMILAR CHEMISTRY AND WILL CONTRIBUTE TO THE DEVELOPMENT OF RESISTANCE.** If after using Topsin 4.5FL Turf and Ornamental Fungicide as recommended, and the treatment is not effective, a tolerant or resistant strain of fungi may be present. Discontinue the use of Topsin 4.5FL Turf and Ornamental Fungicide for at least one season. As long as these precautions are followed, Topsin 4.5FL Turf and Ornamental Fungicide can be useful for disease control, even if resistant strains are present.

TURF APPLICATION –Not for homeowner use. For use only by certified applicators or those under their immediate supervision. Do not apply with fixed wing or rotary aircraft. Not for use on turf being grown for sale or other commercial use as sod.

Do not enter or allow others to enter until sprays have dried.

For use on all fine turf applications such as commercial and residential lawns, parks, athletic fields, golf course greens, tees, and fairways, and cemeteries, consisting of cool and warm season grasses such as Bentgrass, Bluegrass, Bermudagrass, Fescue, Ryegrass, St. Augustinegrass, Zoysiagrass, or their mixtures. When used in accordance with the label, Topsin 4.5FL Turf and Ornamental Fungicide is not phytotoxic to any of the above mentioned grasses. Topsin 4.5FL Turf and Ornamental Fungicide has both preventive and curative activity, and is to be used for the prevention and control of the diseases mentioned below.

Ground Application: Apply Topsin 4.5FL Turf and Ornamental Fungicide with properly calibrated hand held, mechanical or motorized spray equipment or by chemigation through appropriate sprinkler irrigation systems. Spray uniformly over the area to be treated. Apply recommended amounts in sufficient water to obtain thorough coverage of treatment area (2-4 gal. of finished spray per 1,000 sq ft is suggested). When treating golf greens, always treat aprons and approaches. Use the highest recommended rate under conditions of severe disease pressure. For best results, apply after mowing or avoid mowing for at least twelve hours after application.

Lightly water the treatment area with one to two tenths inch of water to move the fungicide into active root zone. Excessive irrigation may move Topsin 4.5FL Turf and Ornamental Fungicide below active root zone and reduce application effectiveness. Green design and drainage will influence irrigation practices. When tank mixing with contact action fungicides for foliar diseases, applications should be allowed to dry on leaf surfaces. Normal watering may proceed after sprays have dried.

General Restrictions

- Do not graze animals on treated turf.
- Do not feed clippings to livestock or poultry.
- Do not apply with fixed wing or rotary aircraft.
- Minimum retreatment interval on turf is 14 days.
- Do not enter or allow others to enter until sprays have dried.

Restrictions for use on residential or public turf (commercial and residential lawns, parks, athletic fields, cemeteries):

- do not apply more than 1.8 fl. oz. product/1000 ft² in one application
- do not apply more than 7.2 fl. oz. product/1000 ft² per year

Restrictions for use on golf courses (tees, greens, apron):

- Do not apply more than 5.34 fl. oz. product/1000 ft² in one application
- Do not apply more than 14.4 fl. oz. product/1000 ft² to tees or greens per year
- Do not apply more than 3.6 fl. oz. product/1000 ft² to fairways (except Florida) per year
- In Florida, do not apply more than 1.8 fl. oz. product/1000 ft² to fairways per year

Rate: fl. oz. product/1,000 sq. ft.		Non Golf Course	
Diseases	Golf courses		Instructions
	Tees & Greens	Fairways **	
Anthracnose: basal <i>Colletotrichum graminicola</i> Anthracnose: foliar <i>Colletotrichum graminicola</i>	3.6 – 5.4 2 – 4	3.6	1.8 For prevention in historic areas of disease pressure, apply twice at 14-day intervals when soil temperature reaches 60°F. For curative control, apply when disease first appears and continue at 14-day intervals as needed. Rotations and/or tank mix combinations with chlorothalonil or triadimefon can be used.
Bermudagrass decline: <i>Gaeumannomyces graminis</i> var. <i>graminis</i> Take-All-Patch: <i>Gaeumannomyces graminis</i> var. <i>avenae</i>	3.6 – 5.4	3.6	1.8 Apply in mid-July or when disease symptoms first appear and repeat at 14-day intervals for suppression. Use higher rates under most severe disease pressure. Follow proper agronomic recommendations to maintain plant vigor.
Cool Season Brown Patch: <i>Rhizoctonia cerealis</i> Necrotic Ring Spot: <i>Leptosphaeria korrea</i> Spring Dead Spot: <i>Leptosphaeria korrea</i>	3.6 – 5.4	3.6	1.8 For prevention, apply in fall before turf has stopped all growth activity. Make second application in early spring when soil temperatures reach 55-60°F or when disease first appears. For curative action, apply when disease first appears in early spring and continue at 14-day intervals.
Coprinus Snow Mold: <i>Coprinus psychromorbidus</i>	3.6 – 5.4	3.6	1.8 Make 2 treatments at 21-day intervals in late fall to early winter, with the last application made just prior to first permanent snow cover.
Fusarium Blight: <i>Fusarium roseum</i> , <i>F. triticum</i>	3.6 – 5.4	3.6	1.8 Apply when disease first appears at 14-day intervals.

Rate: fl. oz. product/1,000 sq. ft.		Non Golf Course	
Diseases	Golf courses		Instructions
	Tees & Greens	Fairways **	
Dollar Spot: <i>Moellerodiscus, Lanzia</i> Large Brown Patch: <i>Rhizoctonia solani</i> Ascochyta Leaf Blight: <i>Ascochyta</i> Copper Spot: <i>Gloeocercospora sorghi</i> Fusarium patch: <i>Fusarium nivale</i> Red Thread: <i>Corticium fuciforme</i> Zoysia Patch: <i>Rhizoctonia solani</i>	2 – 3.6	2 - 3.6	1.8
Gray Leaf Spot (Blast),: <i>Pyricularia grisea</i>	3.6 – 5.4	3.6	1.8
Leaf Spot: <i>Drechlsera</i> Leaf, crown, and root diseases: <i>Bipolaris, Curvularia, Exserohilum</i>	3.6 – 5.4	3.6	1.8
Pink Snow Mold: <i>Microdochium nivale</i>	2 – 3.6	2 – 3.6	1.8
			Apply when disease first appears and continue at 14-day intervals. Rotations and/or tank mix combinations with chlorothalonil, iprodione, or mancozeb can be used.
			Make preventative application before expected period of disease development. Continue applications at 14 day intervals.
			Apply when disease first appears and make applications at 14-day intervals as needed. Rotations and/or tank mix combinations with chlorothalonil, iprodione, or mancozeb are recommended under severe conditions.
			Apply in late fall to early winter before turf has stopped all growth activity. A second application may be used in combination with chlorothalonil, or thiram at recommended rates before snow cover or during spring thaw.

Diseases	Rate: fl. oz. product/1,000 sq. ft.			Instructions
	Golf courses		Non Golf Course	
	Tees & Greens	Fairways **	*	
Rusts: <i>Puccinia</i> , <i>Uromyces</i>	3.6 – 5.4	3.6	1.8	Make 2 applications at 14-day intervals when disease first appears. Rotations and/or tank mix combinations with chlorothalonil or mancozeb are recommended.
Stripe Smut: <i>Ustilago striiformis</i>	3.6 – 5.4	3.6	1.8	Apply at 14-day intervals when disease first appears. For prevention, apply in spring and fall.
Summer Patch: <i>Magnaporthe poae</i>	3.6 – 5.4	3.6	1.8	For prevention, make 3 applications starting late April or early May using 21-day intervals. Rotations and/or tank mix combinations may be used as part of the three application program. For suppression, apply at 14-day intervals when disease first appears.

* public turf (commercial and residential lawns, parks, athletic fields, cemeteries)

** In Florida, do not apply more than 1.8 fl. oz. product/1000 ft² per year to fairways

HORTICULTURAL APPLICATIONS

Nursery Greenhouse, Landscape & Interiorscape
Annual and Perennial Flowers, Bedding Plants, Foliage Plants, Ground Covers, plus
Deciduous and Evergreen Trees and Shrubs

Do not apply this product in a way that will contact any person, pet, either directly or through drift. Keep people and pets out of the area during application.

Homeowners: For use on ornamentals only. Do not apply to home orchards/fruit trees. DO NOT ALLOW PEOPLE OR PETS TO ENTER THE TREATED AREA UNTIL SPRAYS HAVE DRIED.

Certified applicators: Do not enter or allow others to enter until sprays have dried.

Do not use fruit, nuts, or sap from treated trees as food or feed.

Not for homeowner use in New York State.

Topsin 4.5FL Turf and Ornamental Fungicide is a broad spectrum systemic fungicide which controls a variety of foliar, stem, and root diseases on a wide range of commercially important plants. Topsin 4.5FL Turf and Ornamental Fungicide is also effective as a pre-plant dip on cuttings and bulbs. For soil drench applications, best plant protection is achieved with preventative treatments repeated every 21-28 days. For foliar applications, begin treatments when disease first appears, or during suspected periods of disease development. Make additional applications every 7-14 days or as otherwise instructed for the prevention or control of the listed diseases. Use of a wetting agent is recommended for plants that have leaves that are difficult to wet properly. Use of a spreader-sticker is recommended to enhance product performance in wet weather conditions or during periods of overhead irrigation. Topsin 4.5FL Turf and Ornamental Fungicide may be used to control listed diseases on “backyard” ornamental fruit and nut trees such as almond, apple, apricot, cherry, nectarine, peach, pecan, plum, and prune trees. Topsin 4.5FL Turf and Ornamental Fungicide may be applied as a ground application using hand held, mechanical or motorized spray equipment, or as a chemigation spray or through an applicable sprinkler irrigation system; or as an aerial application where applicable. See specific instructions below.

Note: The “Directions For Use” of this product reflect the cumulative inputs from both historical field use and product testing programs. However, it is impossible to test this product on all species and cultivars. A preliminary trial is suggested on a small scale before a full treatment is applied to any plant type not shown on this label but found in a similar use site with a listed disease problem. Wait 5-7 days after treatment to evaluate results. This product is not recommended for use on Swedish Ivy (*Neprolepis exaltata*), Boston Fern (*Plectranthus australis*), and Easter Cactus (*Hatiora gaertneri*).

Some plants may occasionally show some sensitivity to Topsin 4.5FL Turf and Ornamental Fungicide applications, primarily as seedlings. Symptoms rarely affect

marketability of the plants. Please check compatibility under your conditions on small groups of plants to see if there is any sensitivity.

Application Instructions: Apply material with properly calibrated hand held, mechanical or motorized spray equipment or by chemigation thorough appropriate sprinkler irrigation, flood, or drip systems. Begin applications when disease first appears and repeat at 7-14 day intervals or as needed during the growing season. Use the shortest interval when conditions are unusually favorable for the development of disease. For hand held, mechanical, or motorized applications, mix 10 - 20 oz. of Topsin 4.5FL Turf and Ornamental Fungicide per 100 gal. and apply as a full coverage spray to drip for the prevention and control of the diseases listed below. Spray volume may range up to 400 gallons of finished spray per acre depending upon plant species and plant growth stage. For applications through irrigation systems, refer to aerial use rates indicated in the foliar application chart. For small volume applications less than 100 gallons, divide recommended rate by 16 to get the number of teaspoons of Topsin 4.5FLL/gallon water.

Special Instructions For Proportional Injectors (e.g. Dosatron, Dosmatic, Anderson, and similar equipment): Determine the treatment rate as indicated below in the ground application column for crop and pathogen. Determine the injection ratio for the individual system to be used for application. For systems using a 1:100 ratio, measure and add the exact amount of recommended material per 100 gallons to each gallon of water in a stock bucket or tank. For systems using a 1:200 ratio, multiply the recommended amount per 100 gallons by 2. For systems using a 1:50 ratio, divide the recommended amount per 100 gallons by 2. For systems using a 1:16 ratio, divide the recommended amount per 100 gallons by 6. Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute suspension per unit time. An injection ratio of 1:100 is recommended for most greenhouse and nursery systems.

Note: homeowners do not apply more than 51.4 fl. oz. product per acre per single application (1.2 fl. oz. per 1000 sq. ft.).

For cut flowers do not apply more than 14.2 fl. oz. Topsin 4.5FL Turf and Ornamental Fungicide (0.5 lb a.i.) per acre per application.

FOLIAR APPLICATION

Diseases Controlled	Rate fl. oz. product/100 gallons or per acre	Instructions
Anthrachnose	10 - 20	Apply as buds break or at first sign of disease period. Repeat at 7-14 day intervals as needed during disease period.
Black Spot of Rose <i>Diplocarpon rosae</i>	10 - 20	Apply in early summer or at first sign of disease. Repeat at 7-14 days as needed during disease period.
Brown Rot and Blight <i>Monilinia, Sclerotinia,</i>	10 - 20	Apply in late spring or at first sign of disease. Repeat every 7-14 days as needed during

<i>Whetzellinia</i>		disease period.
Fusicladium and Venturia Leaf Scabs on: Crabapple, Hawthorn, Pear, Mountain Ash, Pyracantha, etc.	10 - 20	Apply as buds break. Repeat every 7-14 days as needed during disease period. Effective control requires coverage during leaf expansion. Rotations and/or tank mix combinations with mancozeb, chlorothalonil or propiconazole can be utilized.
Leaf Spots and Blights caused by: <i>Ascochyta, Blumeriella, Botrytis, Cercospora, Coccomyces, Corynespora, Curvularia, Didymellina, Entomosporium, Fabraea, Fusarium, Ramularia, Rhizoctonia, Marssonina, Mycosphaerella, Myrothecium, Phoma, Physalospora, Schizothyrium, Septoria, Sphaceloma</i>	10 - 20	Apply when disease symptoms first appear. Repeat every 7-14 days as needed during disease period. Rotations and/or tank mix combinations with mancozeb or chlorothalonil can be utilized.
Ovulinia Blight	10 – 15	Apply as flowers open. Repeat every 7-14 days as needed during disease period.
Powdery Mildews <i>Erysiphe, Microsphaera, Phyllactinia, Podosphaera, Oidium, Sphaerotheca</i>	10 - 20	Apply when disease first appears and repeat every 7-14 days during disease period. Rotations and/or tank mix combinations with mancozeb or triadimefon can be utilized.
Rust Diseases caused by: <i>Puccinia, Gymnosporangium, Uromyces</i>	10 - 20	Apply in late spring or when symptoms first appear. Repeat every 7-14 days as needed during disease period. Rotations and/or tank mix combinations with mancozeb or chlorathalonil are recommended.
Tip Blight of Pine <i>Sphaeropsis sapinea, Diplodia pinea</i>	15 – 20	Begin application in spring when new growth starts. Make a second application just before needles emerge from the sheath and a third application 14 days later. Thorough coverage is essential for optimal disease control.
Twig Blights, Cankers, and Diebacks <i>Diaporthe, Kabatina,</i>	15 – 20	Apply when symptoms first appear. Repeat every 7-14 days as needed during disease period.

<i>Phoma, Phomopsis</i>		
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SOIL DRENCH APPLICATION

Germination of seedlings of some species and cultivars planted in soil drenched with Topsin 4.5FL Turf and Ornamental Fungicide may be delayed slightly, but the plants typically recover, and will be protected from seedling root infection. Soil drenches on young plants may cause a slight chlorosis (yellowing) of lower leaves, but typically do not affect the upper foliage. Other plants may also show a temporary stunting.

Diseases Controlled	Rate Fl. Oz. product/100 gal.	Instructions
Stem, Crown, and Root Rots caused by: <i>Botrytis</i> , <i>Cylindrocladium</i> , <i>Fusarium</i> , <i>Gliocladium</i> , <i>Myrothecium</i> , <i>Penicillium</i> , <i>Ramularia</i> , <i>Rhizoctonia</i> , <i>Sclerotinia</i> Black Root Rot: <i>Thielaviopsis</i>	10 – 20	Apply as a drench or directed spray using hand held, mechanical, or motorized spray equipment, or as a chemigation drench or directed spray using applicable sprinkler irrigation systems, after seeding or sticking of cuttings (7 oz.) or after transplanting (11-14 oz.) to propagation beds, containers, pots, trays, or nursery or landscape beds at a rate to thoroughly soak the growing media through the root zone. A general guide is 0.25-3 pints of finished mixture per sq ft depending on the media type and depth (about 4 oz. per 4 inch pot or 8 oz. per 6 inch pot). Repeat every 21-28 days for adequate crop protection. Note: Topsin 4.5FL Turf and Ornamental Fungicide does not control <i>Pythium</i> or <i>Phytophthora</i> . Tank mix combinations with metalaxyl, mefenoxam, etridiazole, fosetyl-Al or propamocarb are required for the control of <i>Pythium</i> and <i>Phytophthora</i> .

PLANT DIP APPLICATIONS

Diseases Controlled	Rate Fl. Oz. product/100 gal.	Instructions
Plant or Cutting Diseases caused by: <i>Botrytis</i> , <i>Cylindrocladium</i> , <i>Fusarium</i> , <i>Gliocladium</i> , <i>Myrothecium</i> ,	10 – 20	Immerse plants or cuttings for 10-15 min. Remove and allow to drain. Note: Follow accepted hygiene practices to minimize the introduction and spread of water borne bacterial and water mold fungal diseases.

<i>Penicillium, Ramularia, Rhizoctonia, Sclerotinia, Thielaviopsis</i>		
Bulb, Corm, and Rhizome Rots caused by: <i>Botrytis, Cythroccladium, Fusarium, Gliocladium, Myrothecium Penicillium, Ramularia, Rhizoctonia, Sclerotinia, Thielaviopsis</i>	10 - 20	Soak cleaned bulbs for 15-30 min in warm solution (80-85 °F). For storage disease prevention, treat bulbs preferably within 48 hours after digging. After treatment, dry well before storing. If bulbs are for forcing, treat bulbs that have been heat-cured. Note: Follow accepted hygiene practices to minimize the introduction and spread of water borne bacterial and water mold fungal diseases.

DIRECTIONS FOR USE THROUGH CHEMIGATION SYSTEMS

GENERAL INSTRUCTIONS

Apply this product only through sprinkler irrigation systems including center pivot, lateral move, end tow, side (wheel) roll, traveler, solid set or hand move; or drip (mini-micro sprinklers, strip tubing, trickle) irrigation systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of effectiveness, or illegal pesticide residues in the crop can result from nonuniform distribution of treated water.

If you have any questions about calibration, you should contact State Extension Service specialists, equipment manufacturers or other experts.

A person knowledgeable of the chemigation system and responsible for its operation, or under the supervision of the responsible person, shall shut the system down and make necessary adjustments should the need arise.

Do not connect chemigation system (including greenhouse systems) used for pesticide irrigation to any public water system unless the pesticide label-prescribed safety devices for public water systems are in place. Public water system means a system for the provision of piped water for human consumption if such a system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.

SYSTEM REQUIREMENTS

Chemigation systems connected to public water systems must contain a functional, reduced-pressure zone, backflow preventer (RPZ) or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, the water from the public water system should be discharged into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top or overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe. Systems utilizing a pressurized water and pesticide injection system must meet the following requirements:

The system must contain a functional check valve, vacuum relief valve, and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.

The pesticide injection pipeline must contain a functional, automatic, quick-closing check valve to prevent the flow of fluid back toward the injection pump. The pesticide injection pipeline must also contain a functional, normally closed, solenoid-operated valve located on the intake side of

the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops.

The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.

Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump) effectively designed and constructed of materials that are compatible with pesticides and capable of being fitted with a system interlock.

APPLICATION INSTRUCTIONS

Observe the requirements in the System Requirements section above.

Apply Topsin 4.5FL Turf and Ornamental Fungicide only through systems containing anti-siphon and check valves designed to prevent water source contamination or overflow of the mix tank and containing interlocking controls between the metering device and the water pump to insure simultaneous shut-off.

Maintain a gentle continuous agitation in mix tank during mixing and application to assure a uniform suspension.

Greater accuracy in calibration and distribution will be achieved by injecting a larger volume of a more dilute suspension per unit time.

Application of more than recommended quantities of irrigation water per acre may result in decreased product performance.

Do not apply when wind speed favors drift, when system connections or fittings leak, when nozzles do not provide uniform distribution or when lines containing the product cannot be flushed and must be dismantled and drained. In a center pivot system, block the nozzle set nearest the well/pivot/injection unit to prevent spray being applied to this area.

Where sprinkler distribution patterns do not overlap sufficiently, unacceptable disease control may result.

Allow sufficient time for pesticide to be flushed through all lines and all nozzles before turning off irrigation water.

Topsin 4.5FL Turf and Ornamental Fungicide may be applied in conjunction with chemically neutral liquid fertilizers. Application in conjunction with highly alkaline fertilizers, such as aqueous ammonia, is likely to cause a degradation of the pesticide, resulting in reduced performance and should be avoided.

SPRAY PREPARATION:

Remove scale, pesticide residues, and other foreign matter from the chemical tank and entire injector system. Flush with clean water. Prepare a suspension of Topsin 4.5FL Turf and Ornamental Fungicide in a mix tank. Fill the tank with $\frac{1}{2}$ or $\frac{3}{4}$ the desired amount of water. Start mechanical or hydraulic agitation. Slowly add the required amount of Topsin 4.5FL Turf and Ornamental Fungicide and then the remaining volume of water.

Sprinkler Irrigation - Notes

Observe all System Requirements and Application Instructions above.

Set sprinkler system to deliver a maximum of 0.4 inch of water per acre. Volumes of water higher than this may reduce efficacy. Start sprinkler and then uniformly inject the suspension of Topsin 4.5FL Turf and Ornamental Fungicide into the irrigation water line so as to deliver the desired rate per acre. The suspension of Topsin 4.5FL Turf and Ornamental Fungicide should be injected with a positive displacement pump into the main line ahead of a right angle turn to insure adequate mixing. When treatment with Topsin 4.5FL Turf and Ornamental Fungicide has been completed, do not irrigate the treated area for 24 to 48 hours to prevent washing the chemical off the crop.

Do not apply when wind speed favors drift beyond the area intended for treatment.

Where sprinkler distributed patterns do not overlap sufficiently, unacceptable disease control may result.

Check local restrictions and requirements regarding sprinkler irrigation applications, as they may vary from state to state.

Drip (Mini-Micro Sprinklers, Strip Tubing, Trickle) Irrigation - Notes

Observe all System Requirements and Application Instructions above.

A pesticide supply tank is recommended.

STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage and disposal.

PESTICIDE STORAGE: Store in the original container in a dry area. Do not store in a manner where cross-contamination with other pesticides, fertilizers, food or feed could occur. If spilled during storage or handling, absorb with sand or other inert material and dispose of absorbent in accordance with the Pesticide Disposal Instructions listed below.

PESTICIDE DISPOSAL: Pesticide wastes are toxic. Improper disposal of excess pesticide, spray mixture, or rinsate is a violation of Federal Law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

CONTAINER HANDLING: Nonrefillable container. Do not reuse or refill this container.

For containers ≤ 5 gallons:

Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container ¼ full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

For containers > 5 gallons:

Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Turn the container over onto its other end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

**IMPORTANT INFORMATION
READ BEFORE USING PRODUCT**

CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY

NOTICE: Read the entire Directions for Use and Conditions of Sale and Limitation of Warranty and Liability before buying or using this product. If the terms are not acceptable, return the product at once, unopened, and the purchase price will be refunded.

The Directions for Use of this product reflect the opinion of experts based on field use and tests, and must be followed carefully. It is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness or other unintended consequences may result because of such factors as manner of use or application, weather or crop conditions, presence of other materials or other influencing factors in the use of the product, which are beyond the control of Nippon Soda Co., Ltd. or Seller. Handling, storage, and use of the product by Buyer or User are beyond the control of Nippon Soda Co., Ltd. and Seller. All such risks shall be assumed by Buyer and User, and Buyer and User agree to hold Nippon Soda Co., Ltd. and Seller harmless for any claims relating to such factors.

TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, NIPPON SODA CO., LTD. AND SELLER MAKE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ON THIS LABEL.

To the extent consistent with applicable law, Nippon Soda Co., Ltd. or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product and **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF NIPPON SODA CO., LTD. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF NIPPON SODA CO., LTD. OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

Nippon Soda Co., Ltd. and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of Nippon Soda Co., Ltd.

ACCEPTED

May 22, 2015

Under the Federal Insecticide, Fungicide
and Rodenticide Act as amended, for the
pesticide registered under
EPA Reg. No. 8033-122

DRAFT SUPPLEMENTAL seed treatment label

Supplemental Label for Use as a Seed Treatment

TOPSIN[®] 4.5 FL Fungicide

This supplemental label expires on November 22, 2016 and must not be used or distributed after this date

ACTIVE INGREDIENT:

Thiophanate-methyl (dimethyl[1,2-phenylene]-

bis(iminocarbonothioyl)]bis[carbamate])* 45.0%

OTHER INGREDIENTS: 55.0%

TOTAL: 100.0%

Contains 4.5 pounds thiophanate-methyl per gallon.

*Also known as dimethyl 4,4'-o-phenylenebis[3-thioallophanate]

TOPSIN is a registered trademark of Nippon Soda Co., Ltd.

EPA Reg. No.8033-122

KEEP OUT OF REACH OF CHILDREN

CAUTION

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Both this supplemental label and the full TOPSIN 4.5 FL Fungicide label must be in possession of the user at the time of application. Read the label affixed to the container for TOPSIN 4.5 FL Fungicide before applying.

Use of TOPSIN 4.5 FL Fungicide according to this labeling is subject to the use precautions and limitations imposed by the label affixed to the container for TOPSIN 4.5 FL Fungicide.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Seed treatment applicators and other seed treatment handlers must wear:

- Long-sleeved shirt and long pants,
- Shoes plus socks,

- Chemical-resistant gloves for all mixers and loaders and for applicators using hand-held equipment,
- Chemical-resistant apron for mixers, loaders, and other handlers exposed to the concentrate.

Some materials that are chemical-resistant to this product are nitrile and butyl rubber. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

Note: Persons involved in bagging treated seed, sewing or moving bags of treated seed, or cleaning up bagging areas or seed treatment equipment are pesticide handlers and must wear the PPE required on this label for pesticide handlers.

GENERAL INSTRUCTIONS AND INFORMATION: Seed Treatment

NOTE: This product contains no colorant. The purchaser of this product is responsible for ensuring that all seed treated with this product are adequately colored with a suitable colorant to prevent its accidental use as food for man or feed for animals. Refer to 21CFR, Part 2.25. Any colorant added to treated seed must be cleared for use under 40CFR, Part 180.1001. Alternatively, use in combination with other colored seed treatment products may provide adequate coloration.

TOPSIN 4.5 FL Fungicide is an effective fungicide for seed treatment that provides early season protection of seedlings against rhizoctonia. Seed should be sound and well-cured before treatment.

Do not use TOPSIN 4.5 FL Fungicide in combination with other seed treatment products unless compatibility has been verified. Read and follow carefully all label directions of each combination product. When using combinations of products, the most restrictive of label limitations and precautions must be followed.

Seed Treatment Equipment: TOPSIN 4.5 FL Fungicide may be used both for commercial and for on-farm application. It can be applied with mechanical, slurry, or mist-type seed treating equipment, as long as the equipment can be calibrated to accurately and uniformly apply the product to seed without undue mechanical damage to the seed. Uniform application to seed is important for all seed treatment products.

Treatment of mechanically damaged seed or seed of low vigor or poor quality may result in reduced germination. Treat and conduct germination tests on a small test sample of seed before using this product on commercial quantities. Due to seed quality and seed storage conditions beyond the control of Nippon Soda Co., Ltd. (Nisso), Nisso makes no claims or guarantees as to germination of carry-over seed.

Seed should be sound and well-cured before treatment. Refer to the label rates below. TOPSIN 4.5 FL Fungicide is typically diluted with water and/or mixed with other products to attain an appropriate slurry application volume (fl.oz/cwt slurry rates) to

provide effective treating. The appropriate volume of slurry depends on crop, weather, type of treater and other factors and should be adjusted as per normal treating practices for the circumstances. Contact your local supplier or distributor representative for specific recommendations.

TO ENSURE UNIFORMITY, MIX PRODUCT WELL BEFORE USE.

TOPSIN 4.5 FL Fungicide plus water and/or other treatments should be mixed thoroughly prior to treating seed. Recalibrate treating equipment to compensate for the required slurry rate to ensure all products are applied at the correct rate.

APPLICATION INSTRUCTIONS

Crop(s)	Application Rate
<p>WHEAT, TRITICALE</p> <p><i>For early season control of seed decay (Fusarium, Rhizoctonia) and suppression of seedling blight (Fusarium, Rhizoctonia)</i></p>	<p>0.14 – 0.28 fl.oz./cwt</p>
<p>SOYBEANS</p> <p>NOTE: Seed may be treated on a fl.oz./seed unit (to deliver a target mg active ingredient/kernel) basis or and a per weight of seed basis, as shown.</p> <p><i>For early season control of seed decay (Phomopsis, Fusarium, Rhizoctonia) and suppression of seedling blight (Fusarium, Rhizoctonia)</i></p>	<p>Per Seed Unit: 0.065-0.13 fl.oz./seed unit (140,000 seeds) (applies 0.0075-0.015 mg ai/seed)</p> <p>OR Per Seed Weight: 0.14 – 0.28 fl.oz./cwt</p>
<p>DRY BEANS and SNAP BEANS:</p> <p><i>For early season control of seed decay (Phomopsis, Rhizoctonia) and suppression of seedling blight (Fusarium, Rhizoctonia)</i></p>	<p>0.14 – 0.28 fl.oz./cwt</p>

Use higher rates for higher levels of seedling blight protection.

TREATED SEED LABELING

THE FEDERAL SEED ACT REQUIRES THAT BAGS CONTAINING TREATED SEED MUST BE LABELED WITH THE FOLLOWING INFORMATION:

- "This bag contains seed treated with TOPSIN 4.5 FL Fungicide containing thiophanate-methyl. **Do not** use for food, feed, or oil purposes. Store away from feed and food stuffs."

LABELS FOR COMMERCIALY TREATED SEED MUST ALSO INCLUDE THE FOLLOWING ENVIRONMENTAL HAZARDS STATEMENTS:

- "Exposed treated seed may be hazardous to birds and wildlife. Dispose of all excess treated seed and seed packaging or containers by burial away from bodies of water in accordance with any local requirements. Cover, incorporate, or collect treated seeds spilled during loading and planting. **DO NOT** contaminate bodies of water when disposing of planting equipment wash water."

THE U.S. ENVIRONMENTAL PROTECTION AGENCY REQUIRES THE FOLLOWING STATEMENTS ON CONTAINERS CONTAINING TREATED SEED:

- "DO NOT allow children, pets or livestock to have access to treated seeds."
- "DO NOT graze or feed livestock on treated areas for 45 days after planting."
- "Wear long pants, long-sleeved shirt, shoes, socks and chemical-resistant gloves when opening this bag or loading/pouring the treated seed."
- "After the seeds have been planted, do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. Exception: If the treated seed is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is: coveralls, chemical-resistant gloves made of any waterproof material, and chemical-resistant footwear."

USE RESTRICTIONS

Care must be exercised in the handling of treated seed. Augers used for handling treated seed should not be used to move seed for feed, food or oil processing. Do not re-use bags from treated seed to handle food or feed products.

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READ BEFORE USING PRODUCT**

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TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, NIPPON SODA CO., LTD. AND SELLER MAKE NO WARRANTIES OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE NOR ANY OTHER EXPRESS OR IMPLIED WARRANTY EXCEPT AS STATED ON THIS LABEL.

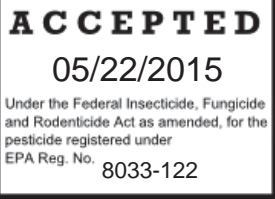
To the extent consistent with applicable law, Nippon Soda Co., Ltd. or Seller shall not be liable for any incidental, consequential or special damages resulting from the use or handling of this product and **THE EXCLUSIVE REMEDY OF THE USER OR BUYER, AND THE EXCLUSIVE LIABILITY OF NIPPON SODA CO., LTD. AND SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, SHALL BE THE RETURN OF THE PURCHASE PRICE OF THE PRODUCT OR, AT THE ELECTION OF NIPPON SODA CO., LTD. OR SELLER, THE REPLACEMENT OF THE PRODUCT.**

Treatment of seed, especially seed that is mechanically damaged or seed known to be of low vigor and poor quality, may result in reduced germination and/or reduction of seed and seedling vigor. Treat and conduct germination tests on a small test sample of seed before treating commercial quantities with a selected chemical treatment that includes this product. Due to seed quality and seed storage conditions beyond the control of Nippon Soda Co., Ltd. (Nisso), Nisso makes no claims or guarantees as to germination of carry-over seed.

Nippon Soda Co., Ltd. and Seller offer this product, and Buyer and User accept it, subject to the foregoing conditions of sale and limitations of warranty and of liability, which may not be modified except by written agreement signed by the duly authorized representative of Nippon Soda Co., Ltd.



Nippon Soda Co., Ltd.
c/o Nisso America Inc.
88 Pine St., 14th FL.
New York, NY 10005



Supplemental Label for Use as a Seed Treatment

TOPSIN[®] 4.5 FL Fungicide

This supplemental label expires on November 22, 2016 and must not be used or distributed after this date

ACTIVE INGREDIENT:

Thiophanate-methyl (dimethyl[1,2-phenylene]-bis(iminocarbonothioyl)]bis[carbamate])*	45.0%
OTHER INGREDIENTS:	<u>55.0%</u>
TOTAL:	100.0%

Contains 4.5 pounds thiophanate-methyl per gallon.
*Also known as dimethyl 4,4'-o-phenylenebis[3-thioallophanate]
TOPSIN is a registered trademark of Nippon Soda Co., Ltd.

EPA Reg. No.8033-122

KEEP OUT OF REACH OF CHILDREN
CAUTION

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

Both this supplemental label and the full TOPSIN 4.5 FL Fungicide label must be in possession of the user at the time of application. Read the label affixed to the container for TOPSIN 4.5 FL Fungicide before applying.

Use of TOPSIN 4.5 FL Fungicide according to this labeling is subject to the use precautions and limitations imposed by the label affixed to the container for TOPSIN 4.5 FL Fungicide.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

Seed treatment applicators and other seed treatment handlers must wear:

- Long-sleeved shirt and long pants,
- Shoes plus socks,

- Chemical-resistant gloves for all mixers and loaders and for applicators using hand-held equipment,
- Chemical-resistant apron for mixers, loaders, and other handlers exposed to the concentrate.

Some materials that are chemical-resistant to this product are nitrile and butyl rubber. If you want more options, follow the instructions for category C on an EPA chemical-resistance category selection chart.

Note: Persons involved in bagging treated seed, sewing or moving bags of treated seed, or cleaning up bagging areas or seed treatment equipment are pesticide handlers and must wear the PPE required on this label for pesticide handlers.

GENERAL INSTRUCTIONS AND INFORMATION: Seed Treatment

NOTE: This product contains no colorant. The purchaser of this product is responsible for ensuring that all seed treated with this product are adequately colored with a suitable colorant to prevent its accidental use as food for man or feed for animals. Refer to 21CFR, Part 2.25. Any colorant added to treated seed must be cleared for use under 40CFR, Part 180.1001. Alternatively, use in combination with other colored seed treatment products may provide adequate coloration.

TOPSIN 4.5 FL Fungicide is an effective fungicide for seed treatment that provides early season protection of seedlings against rhizoctonia. Seed should be sound and well-cured before treatment.

Do not use TOPSIN 4.5 FL Fungicide in combination with other seed treatment products unless compatibility has been verified. Read and follow carefully all label directions of each combination product. When using combinations of products, the most restrictive of label limitations and precautions must be followed.

Seed Treatment Equipment: TOPSIN 4.5 FL Fungicide may be used both for commercial and for on-farm application. It can be applied with mechanical, slurry, or mist-type seed treating equipment, as long as the equipment can be calibrated to accurately and uniformly apply the product to seed without undue mechanical damage to the seed. Uniform application to seed is important for all seed treatment products.

Treatment of mechanically damaged seed or seed of low vigor or poor quality may result in reduced germination. Treat and conduct germination tests on a small test sample of seed before using this product on commercial quantities. Due to seed quality and seed storage conditions beyond the control of Nippon Soda Co., Ltd. (Nisso), Nisso makes no claims or guarantees as to germination of carry-over seed.

Seed should be sound and well-cured before treatment. Refer to the label rates below. TOPSIN 4.5 FL Fungicide is typically diluted with water and/or mixed with other products to attain an appropriate slurry application volume (fl.oz/cwt slurry rates) to

provide effective treating. The appropriate volume of slurry depends on crop, weather, type of treater and other factors and should be adjusted as per normal treating practices for the circumstances. Contact your local supplier or distributor representative for specific recommendations.

TO ENSURE UNIFORMITY, MIX PRODUCT WELL BEFORE USE.

TOPSIN 4.5 FL Fungicide plus water and/or other treatments should be mixed thoroughly prior to treating seed. Recalibrate treating equipment to compensate for the required slurry rate to ensure all products are applied at the correct rate.

APPLICATION INSTRUCTIONS

Crop(s)	Application Rate
<p>WHEAT, TRITICALE</p> <p><i>For early season control of seed decay (Fusarium, Rhizoctonia) and suppression of seedling blight (Fusarium, Rhizoctonia)</i></p>	<p>0.14 – 0.28 fl.oz./cwt</p>
<p>SOYBEANS</p> <p>NOTE: Seed may be treated on a fl.oz./seed unit (to deliver a target mg active ingredient/kernel) basis or and a per weight of seed basis, as shown.</p> <p><i>For early season control of seed decay (Phomopsis, Fusarium, Rhizoctonia) and suppression of seedling blight (Fusarium, Rhizoctonia)</i></p>	<p>Per Seed Unit: 0.065-0.13 fl.oz./seed unit (140,000 seeds) (applies 0.0075-0.015 mg ai/seed)</p> <p>OR Per Seed Weight: 0.14 – 0.28 fl.oz./cwt</p>
<p>DRY BEANS and SNAP BEANS:</p> <p><i>For early season control of seed decay (Phomopsis, Rhizoctonia) and suppression of seedling blight (Fusarium, Rhizoctonia)</i></p>	<p>0.14 – 0.28 fl.oz./cwt</p>

Use higher rates for higher levels of seedling blight protection.

TREATED SEED LABELING

THE FEDERAL SEED ACT REQUIRES THAT BAGS CONTAINING TREATED SEED MUST BE LABELED WITH THE FOLLOWING INFORMATION:

- "This bag contains seed treated with TOPSIN 4.5 FL Fungicide containing thiophanate-methyl. **Do not** use for food, feed, or oil purposes. Store away from feed and food stuffs."

LABELS FOR COMMERCIALY TREATED SEED MUST ALSO INCLUDE THE FOLLOWING ENVIRONMENTAL HAZARDS STATEMENTS:

- "Exposed treated seed may be hazardous to birds and wildlife. Dispose of all excess treated seed and seed packaging or containers by burial away from bodies of water in accordance with any local requirements. Cover, incorporate, or collect treated seeds spilled during loading and planting. **DO NOT** contaminate bodies of water when disposing of planting equipment wash water."

THE U.S. ENVIRONMENTAL PROTECTION AGENCY REQUIRES THE FOLLOWING STATEMENTS ON CONTAINERS CONTAINING TREATED SEED:

- "DO NOT allow children, pets or livestock to have access to treated seeds."
- "DO NOT graze or feed livestock on treated areas for 45 days after planting."
- "Wear long pants, long-sleeved shirt, shoes, socks and chemical-resistant gloves when opening this bag or loading/pouring the treated seed."
- "After the seeds have been planted, do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) of 12 hours. Exception: If the treated seed is soil-injected or soil-incorporated, the Worker Protection Standard, under certain circumstances, allows workers to enter the treated area if there will be no contact with anything that has been treated. PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water is: coveralls, chemical-resistant gloves made of any waterproof material, and chemical-resistant footwear."

USE RESTRICTIONS

Care must be exercised in the handling of treated seed. Augers used for handling treated seed should not be used to move seed for feed, food or oil processing. Do not re-use bags from treated seed to handle food or feed products.

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